Focused Site Inspection Prioritization Report

for the

Bosch Trucking Firm

USEPA ID No. ILD 005 938 790

August 3, 1995

Prepared for
U.S. Environmental Protection Agency
Contract 68-W8-0064
Work Assignment 32-5JZZ

For U.S. Environmental Protection Agency, Region V

Approved by: Alan Altshuler Date: 8/15/95

For Illinois Environmental Protection Agency

Approved by:_____ Date: _____

-0216-

Contents

Figures

Appendix

1.0 Introduction

On December 13, 1994, Black & Veatch Waste Science, Inc., the Alternate Remedial Contracting Strategy (ARCS) V contractor, was authorized, by approval of the work plan amendment by the U.S. Environmental Protection Agency (USEPA) Region V, to conduct a focused site inspection prioritization (FSIP) of several sites in Illinois.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) established a federal program for responding to the risks posed by uncontrolled releases of hazardous substances. CERCLA required the federal government to establish criteria for setting priorities among releases or threatened releases and specified these criteria be used to establish the National Priorities List. The USEPA responded to these mandates by developing the Hazard Ranking System (HRS) to more accurately quantify the relative risk posed by hazardous waste substance releases. A revised HRS was published in December 1990.

The objective of the FSIP is to review the outstanding screening site inspections (SSIs) performed before the implementation of the revised HRS for which a final decision has not been made regarding further action. The FSIP will determine whether the existing SSI information meets a minimum standard to reflect the revised HRS and if not, collect additional information by file review, reconnaissance and sampling on an as-needed basis. The FSIP will evaluate the threats posed to human health and environment and provide sufficient documentation for USEPA to decide the appropriate future course of action (No Further Remedial Action Planned [NFRAP], further evaluation, preparation of HRS package).

2.0 Site Background

2.1 Site History

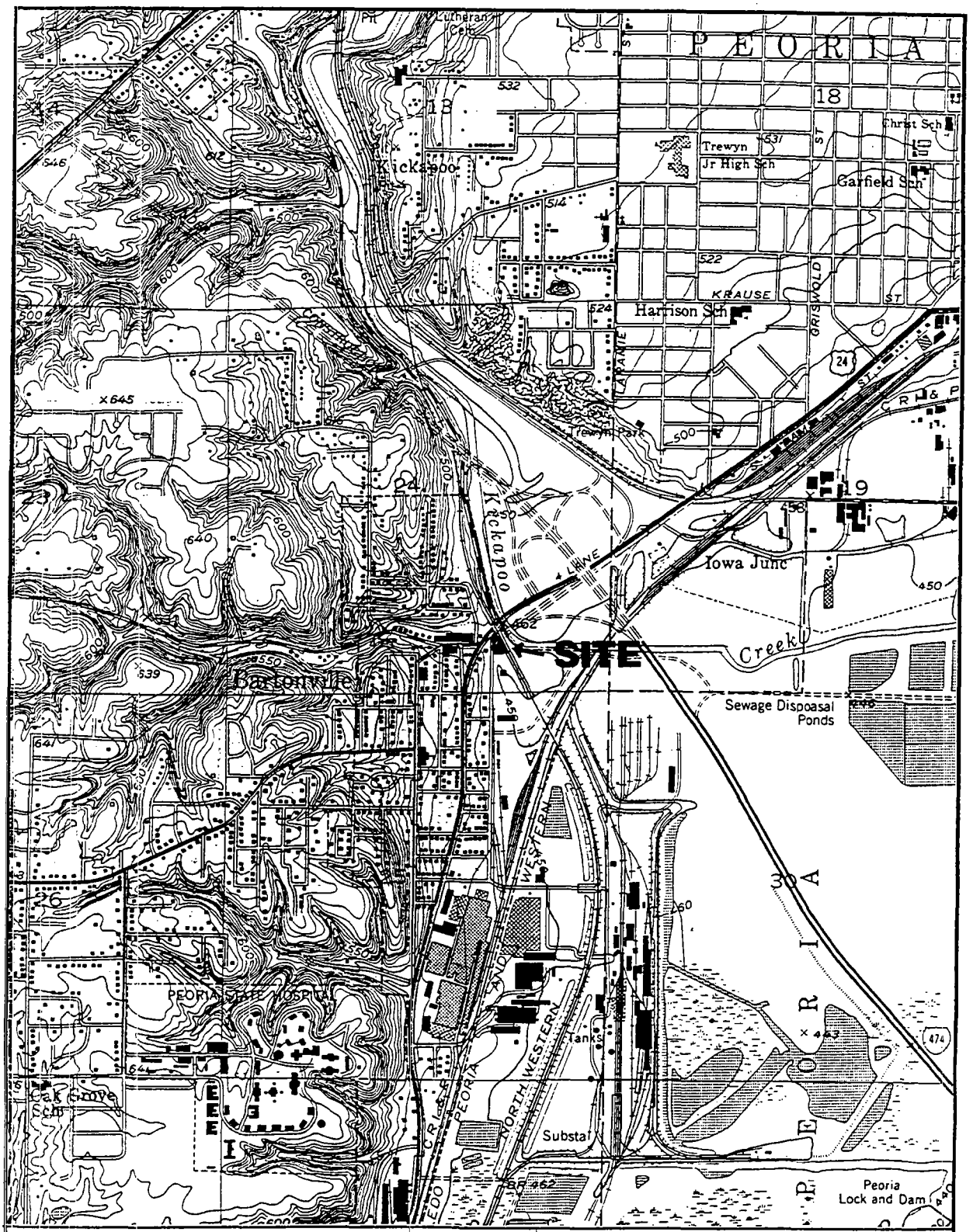
The Bosch Trucking Firm, located in Bartonville, Peoria County, Illinois, was used between 1968 and 1994 as a trucking depot. Before development, the site was a low lying swampy area, filled with an unknown amount of steel slag and covered with coke and coal cinders produced by Keystone Steel and Wire Company. A possibility exists that municipal and landscape waste were dumped in the swampy area. A McDonald's fast food restaurant is now located on the site. Figure 1 is a site location map; Figure 2 is a site sketch.

2.2 Past Site Characterization Studies

On June 8, 1980, a complaint was filed with the Illinois Environmental Protection Agency (IEPA) concerning the site. On June 12, 1980, IEPA investigated the complaint. The IEPA determined during the inspection that the trucking depot was located over an old landfill, and that 7 employees had died of lung, colon, bone marrow, and tumor cancer. The case was referred to the Illinois Department of Health, Toxic Substances Office, which was asked to determine if hazardous waste was a concern at the site. On August 12, 1980, the investigation was dropped. The USEPA recommended "no action needed" because the site was a not a hazardous waste site on a Potential Hazardous Waste Site, Final Strategy Determination EPA Form T2070-5, which was completed on August 7, 1980.

The IEPA completed a preliminary assessment of the site on April 4, 1986. The IEPA assigned a medium priority rating to the site because five employees of the trucking depot had died from cancer.

On July 22, 1988, the IEPA received an anonymous complaint alleging that hazardous waste contained in leaking drums was stored behind an onsite building in an uncontrolled area. In response to the complaint, the IEPA conducted a Resource Conservation and Recovery Act site inspection on August 11, 1988. During the inspection, one wastestream was generated onsite, which was used crankcase oil from the trucks operated from the facility. The used oil was stored in drums, which were in good condition and not leaking. The drums were periodically removed for disposal by a waste disposal contractor. The site inspection narrative indicated the site submitted notification on December 22, 1986, to the IEPA that it was a generator. Based on the inspection report, the IEPA issued a letter to the facility



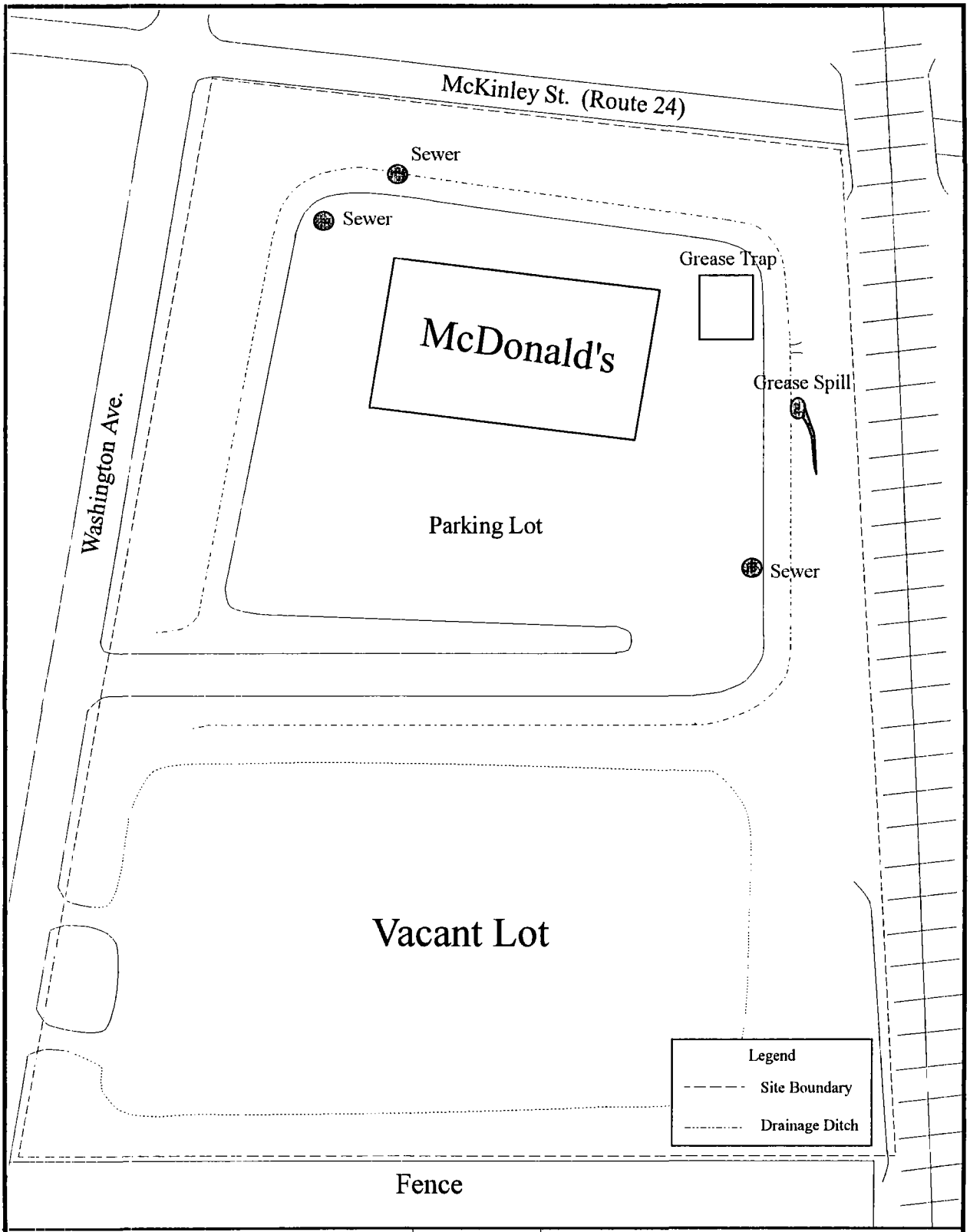
Source: USGS 7.5 topographic map
Peoria West, 1949 [PR 1979]

Scale: Miles
0.0 0.5

N

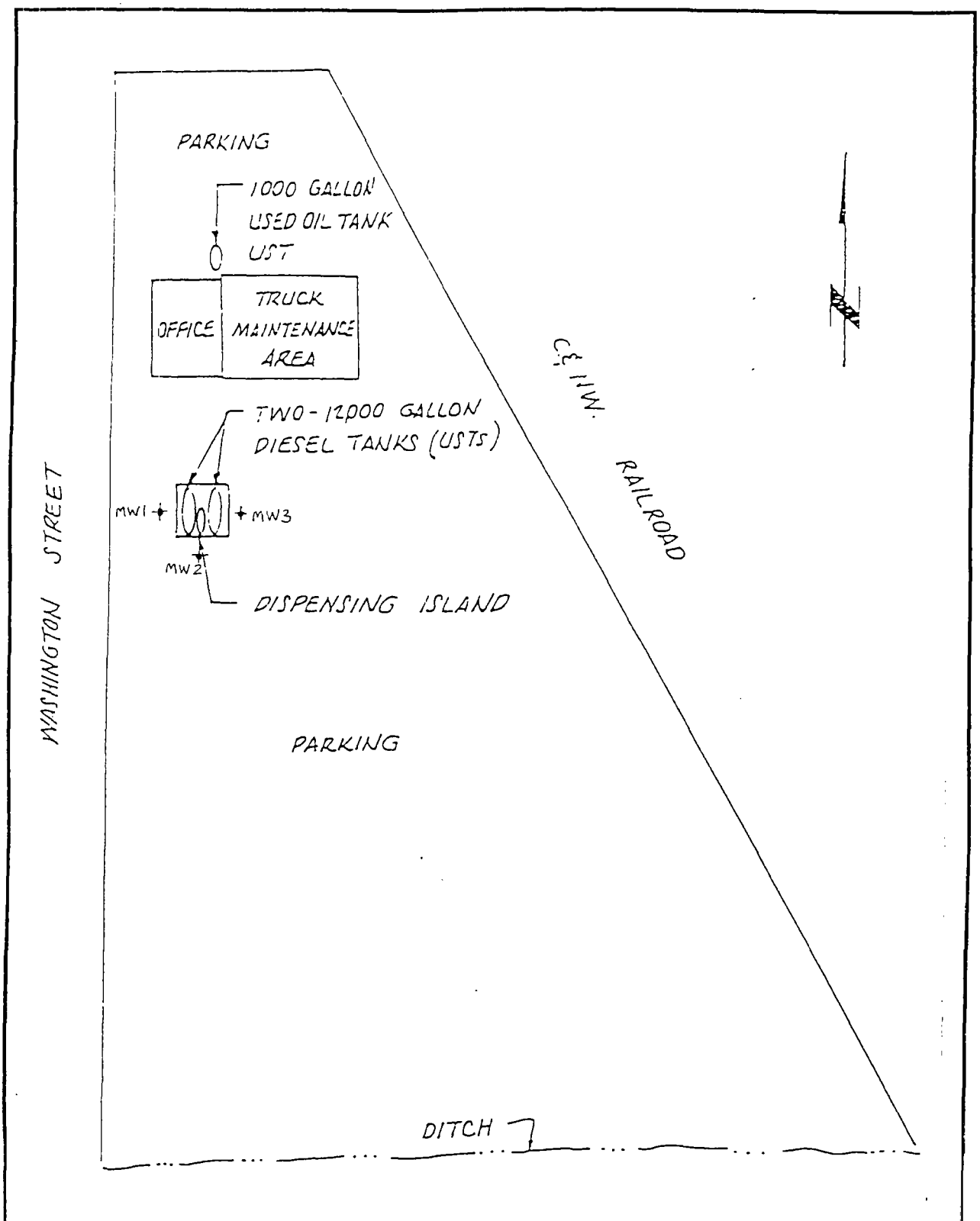
Figure 1
Site Location Map

Bosch Trucking Firm
Bartonville, Illinois



Source: 1995 Site Reconnaissance	N	Figure 2 Site Sketch
Scale: Not to Scale		Bosch Trucking Fim Bartonville, Illinois

FRE00241
07.27.95



Source: Environmental Science & Engineering, Inc. 1993	N	Figure 3 Old Site Map
Scale: Not to Scale		Bosch Trucking Fim Bartonville, Illinois

FRE00366
09.28.95

indicating it was not regulated under 35 Illinois Administrative Code Parts 720-725 and recommending the facility withdraw from its status under these regulations.

On September 21, 1989, U.S. Environmental Protection Agency Field Investigation Team personnel conducted a Screening Site Inspection at the site and collected seven soil samples. Four samples were collected from low-lying areas where site runoff may have accumulated or from areas of stained surface soil. Two samples were subsurface soil samples collected to characterize a mounded area and a bermed area. Analytical results of the surface soil samples indicated the presence of benzene, toluene, ethylbenzene, and xylene (BTEX); various polynuclear aromatic hydrocarbons (PAHs); pesticides, including endrin and 4,4'-DDD; and various metals, including mercury and cadmium. Analytical results of the subsurface samples indicated the presence of 2-methylnaphthalene; however, the samples were not collected over the landfilled area. The compounds detected may have been spilled and leaked oils, greases, and hydraulic fluids associated with the day-to-day operations of the trucking firm. No surface water or groundwater samples were collected.

In 1993, Environmental Science & Engineering, Inc., removed three underground storage tanks from the site. Two of the tanks, each of which had a 12,000 gallon capacity and were used for diesel storage, were found to be rusted and leaking when they were removed. The third tank had a 1,000-gallon capacity and was used for waste oil storage. The tank was visually inspected and determined not to have leaked. As part of the closure of the tanks, approximately 1,065 cubic yards of contaminated soil was excavated between December 21, 1993, and April 20, 1994. Excavated soil was field screened using a photoionization detector; however, confirmation post-removal samples indicated PAHs remained in the ground. The IEPA Leaking Underground Storage Tank Unit accepted closure of the tanks on August 4, 1994, although analytical results of one of the nine samples collected from the final excavation indicated the presence of benzo(b)fluoranthene above the state action limit. Three monitoring wells were installed in association with the tank removal, and one sample was collected from each well. Analytical results of these groundwater samples did not indicate the presence of BTEX or PAHs.

2.3 FSIP Site Reconnaissance/Sampling

In January 1995, the ARCS contractor began reviewing background data for the Bosch Trucking Firm. A site reconnaissance was conducted on February 13, 1995. Appendix A contains photographs taken during the reconnaissance.

The southeastern corner of Washington Avenue and McKinley Street (Route 24) is now a McDonald's restaurant. The building is raised on a compacted fill base, approximately 5 feet above ground surface, which slopes away 15 to 20 feet around the concrete curb perimeter. The slope face is covered with dried grass and a plastic mesh netting, presumably to prevent erosion. At the base of the eastern slope is a small opening lined with a hard rubber support. To the east is a railroad line elevated by 40 feet of earth. A shallow culvert has formed along the eastern side, where runoff from the opposing sides has drained. A grease trap is located behind the restaurant building. An inspection of the culvert showed that grease had been dumped on the eastern slope of the base. South of the restaurant grounds is a vacant lot of non-vegetated soil where several semi-trucks were parked. No other notable features were observed.

3.0 Pathway Evaluation

A review of the records obtained by the ARCS V contractor indicates the site soils are a potential source at the Bosch Trucking Firm site. A contaminated soil area of 87,120 square feet was determined from the background file data. The program evaluated four contaminant transport pathways: groundwater, surface water, soil exposure and air.

3.1 Groundwater Pathway

No releases have been documented to the groundwater pathway. The site is underlain by the Sankoty Sand Member of the Banner Formation. It is a well sorted, medium- to coarse-grained sand, distinguished by an abundance of highly polished pink quartz grains. It is 300 feet thick beneath the site and at a depth of 30 feet. Area residents receive their water from municipal groundwater wells. Illinois Environmental Protection Agency Reports indicate all municipal wells are screened in the Sankoty Sand aquifer. The nearest drinking water well is approximately 1 mile northwest of the site. An estimated 85,717 people are served by wells within a 4-mile radius of the site.

3.2 Surface Water Pathway

No releases have been documented to the surface water pathway. Surface water runoff travels by overland flow to Kickapoo Creek 300 feet north of the site. Kickapoo Creek flows for 2 miles and enters the Illinois River. Both water bodies are considered fisheries. There are 1.7 miles of wetland frontage along the Illinois River. No other sensitive environments are along the surface water pathway.

3.3 Soil Exposure Pathway

Analysis of surface soil samples indicates the presence of volatile and semivolatile organic compounds, pesticides and inorganic analytes; however the likelihood of exposure is low. A portion of the site is paved and has a McDonald's restaurant on it. The other portion is vacant and unused. The site is not fenced. The nearest individual is a 0.01 miles from the site. Approximately 2,330 people reside within one mile of the site.

3.4 Air Pathway

No air contamination has been documented or reported. No air samples have been collected at the site. Approximately 23,376 people live within a 4-mile radius of the site. Approximately 1,630 acres of wetlands, Worley Lake Heron Colony, and a habitat for a state endangered bird are located within 4 miles of the site.

4.0 Summary

The ARCS V contractor conducted a thorough review of the available files associated with the Bosch Trucking Firm site. It was concluded that site wastes do not constitute a possible threat to nearby populations or sensitive environments.

5.0 References

Ecology & Environment, Inc., 1991, Screening Site Inspection Report for the Bosch Trucking Firm, April 30.

Environmental Science & Engineering, Inc., letter from Richard S. Pletz, Senior Environmental Geologist, to Angela Aye-Tin, Division of Land Pollution Control, Illinois Environmental Protection Agency, regarding LUST incident 923577. May 10, 1994.

Illinois Environmental Protection Agency, 1992, Division of Public Water Supplies, Raw Source Location Report.

Illinois Environmental Protection Agency letter from John G. Tripses, Division of Land Pollution Control, to Steve Foreaker, Bosch Trucking, regarding August 11, 1986, IEPA RCRA site inspection. September 29, 1988.

Illinois Environmental Protection Agency, Division of Land Pollution Control Complaint Investigation Form of Bosch Trucking inspection conducted on June 12, 1980.

Illinois Environmental Protection Agency letter from G. Tod Rowe, LUST Section, Division of Land Pollution Control, to F.B. Hubachek, Jr., representing Bosch Marital Trust, regarding LUST incident 923577. August 4, 1994.

Illinois Environmental Protection Agency, Potential Hazardous Waste Site Identification and Preliminary Assessment for Bosch Trucking Firm. April 10, 1986.

Illinois Natural Heritage Database, List of Illinois Nature Preserves, Natural Area Inventory, and Endangered and Threatened Species Groups by county. April 1995.

Illinois State Water Survey, Groundwater Section, documentation of Banner Formation, January 11, 1988.

U.S. Department of Commerce, Proof Copy Table Generated for 1990, CPH-1: Summary Population and Housing Characteristics, Illinois, issued by Bureau of the Census, August, 1991.

U.S. Department of Housing and Urban Development, Federal Insurance Administration, Flood Boundary and Floodway Map, City of Peoria, IL Panel No. 170075 0005 B, November 15, 1979.

U.S. Department of the Interior, National Wetlands Inventory, 7.5 Minute Quadrangle, Peoria East, IL (1986); Peoria West, IL (1986); Marquette Heights, IL (1986); Pekin, IL (1986).

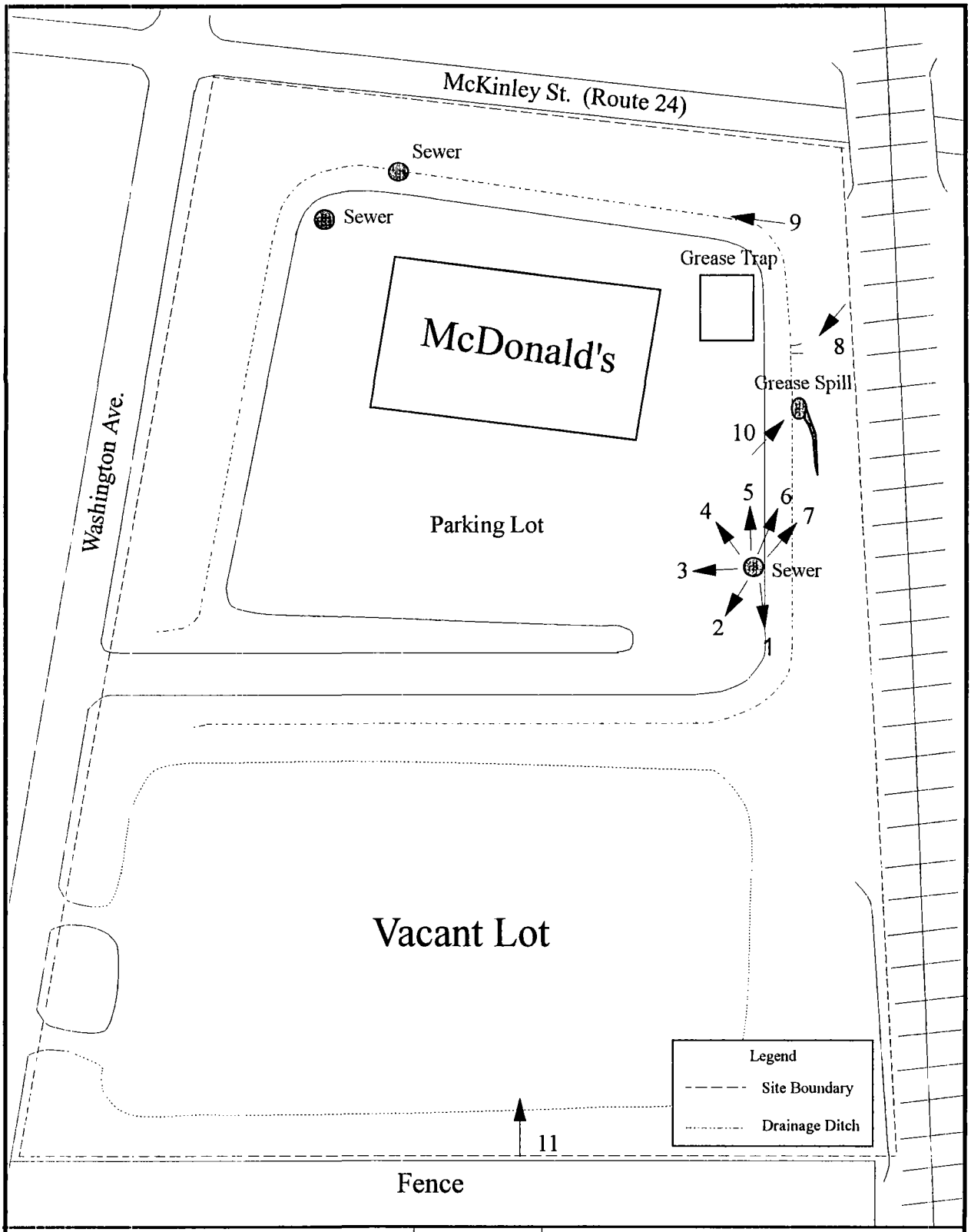
U.S. Environmental Protection Agency, Graphical Exposure Modeling System (GEMS) Database, compiled from U.S. Bureau of the Census data, 1983.

U.S. Environmental Protection Agency Potential Hazardous Waste Site, Final Strategy Determination EPA Form T2070-5, Bosch Trucking Firm. August 7, 1980.

U.S. Geological Survey, 7.5 Minute Quadrangle Topographic Map, Peoria East, IL (1949); Peoria West, IL (1949); Marquette Heights, IL (1960); Pekin, IL (1960).

U.S. Geological Survey, Water Resources Data for Illinois Water Year 1991, Volume 2. Illinois River Basin, Report IL-91-2, prepared in cooperation with the State of Illinois and with Other Agencies.

Appendix A
Site Reconnaissance Photographs



Source: 1995 Site Reconnaissance	N	Figure A-1 Photo Location Map
Scale: Not to Scale		Bosch Trucking Fim Bartonville, Illinois

FRE00334
07.27.95

Date: 2/13/95

Time: 1554

Photo Taken By: B. Berena

Photo Number: 1

Location/ILD #: Bosch Trucking Firm
ILD 005 938 790

Direction: South

Description: South end of McDonald's parking lot and vacant lot.

Date: 2/13/95

Time: 1554

Photographer: B. Berena

Photo #: 2

Location/ILD #: Bosch Trucking Firm
ILD 005 938 790

Direction: Southwest

Description: Entrance drive to McDonald's. Semi trucks parked in vacant lot to the south.

Date: 2/13/95

Time: 1555

Photo Taken By: B. Berena

Photo Number: 5

Location/ILD #: Bosch Trucking Firm
ILD 005 938 790

Direction: North

Description: Grease trap behind restaurant.

Date: 2/13/95

Time: 1555

Photographer: B. Berena

Photo #: 6

Location/ILD #: Bosch Trucking Firm
ILD 005 938 790

Direction: Northeast

Description: East slope face of compacted base covered with grass and plastic mesh netting and aggregate.

Date: 2/13/95

Time: 1555

Photo Taken By: B. Berena

Photo Number: 7

Location/ILD #: Bosch Trucking Firm
ILD 005 938 790

Direction: Northeast

Description: Railroad embankment east of parking lot.

Date: 2/13/95

Time: 1602

Photographer: B. Berena

Photo #: 8

Location/ILD #: Bosch Trucking Firm
ILD 005 938 790

Direction: Southwest

Description: Opening in east slope face of compacted base.

Date: 2/13/95

Time: 1554

Photo Taken By: B. Berena

Photo Number: 3

Location/ILD #: Bosch Trucking Firm
ILD 005 938 790

Direction: West

Description: McDonald's parking lot.

Date: 2/13/95

Time: 1554

Photographer: B. Berena

Photo #: 4

Location/ILD #: Bosch Trucking Firm
ILD 005 938 790

Direction: Northwest

Description: McDonald's restaurant.

Date: 2/13/95

Time: 1605

Photo Taken By: B. Berena

Photo Number: 9

Location/ILD #: Bosch Trucking Firm
ILD 005 938 790

Direction: West

Description: North slope face of compacted base.

Date: 2/13/95

Time: 1622

Photographer: B. Berena

Photo #: 10

Location/ILD #: Bosch Trucking Firm
ILD 005 938 790

Direction: Northeast

Description: Grease spill between east slope face and railroad embankment.

Date: 2/13/95

Time: 1645

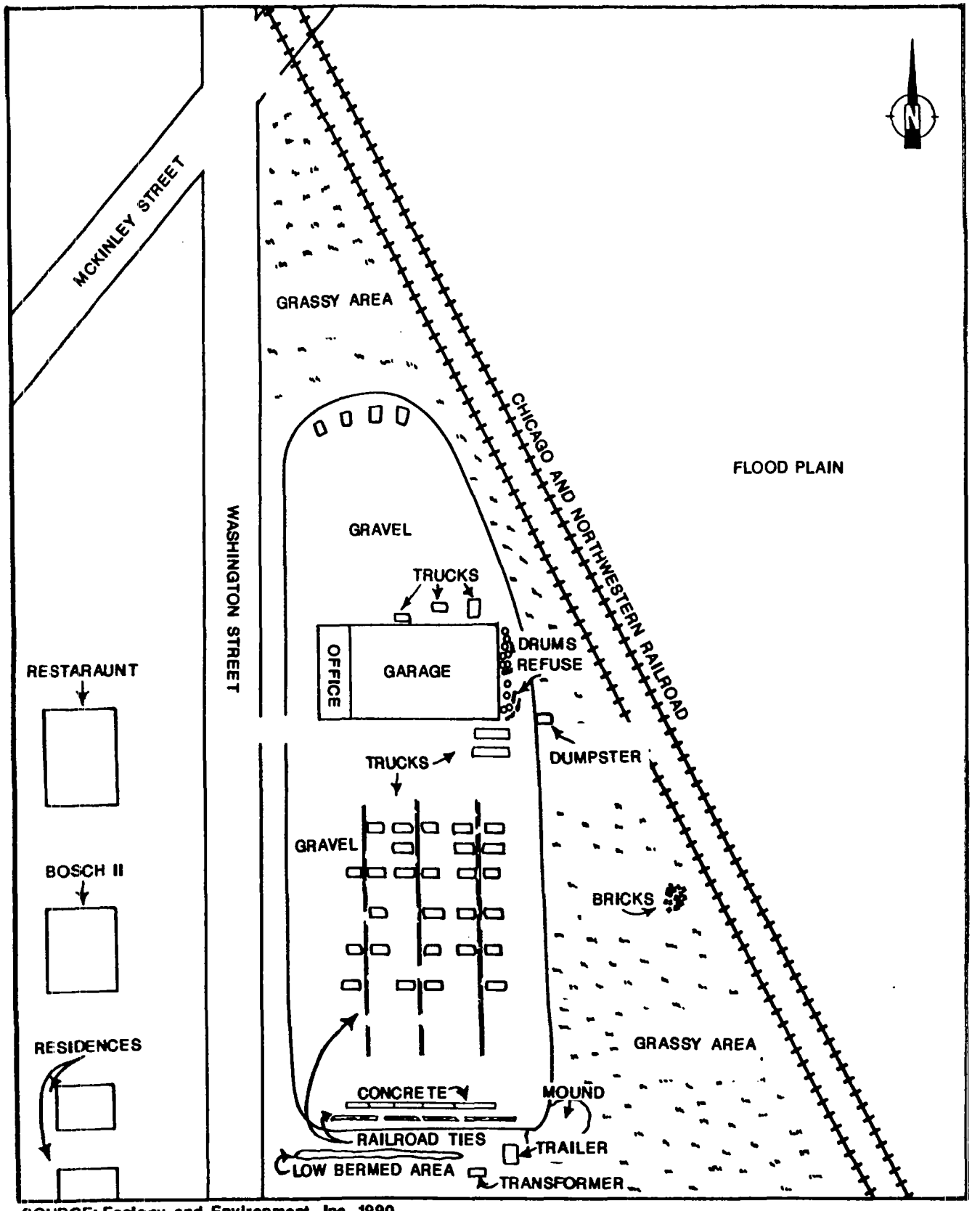
Photo Taken By: B. Berena

Photo Number: 11

Location/ILD #: Bosch Trucking Firm
ILD 005 938 790

Direction: North

Description: Vacant lot and McDonald's restaurant.

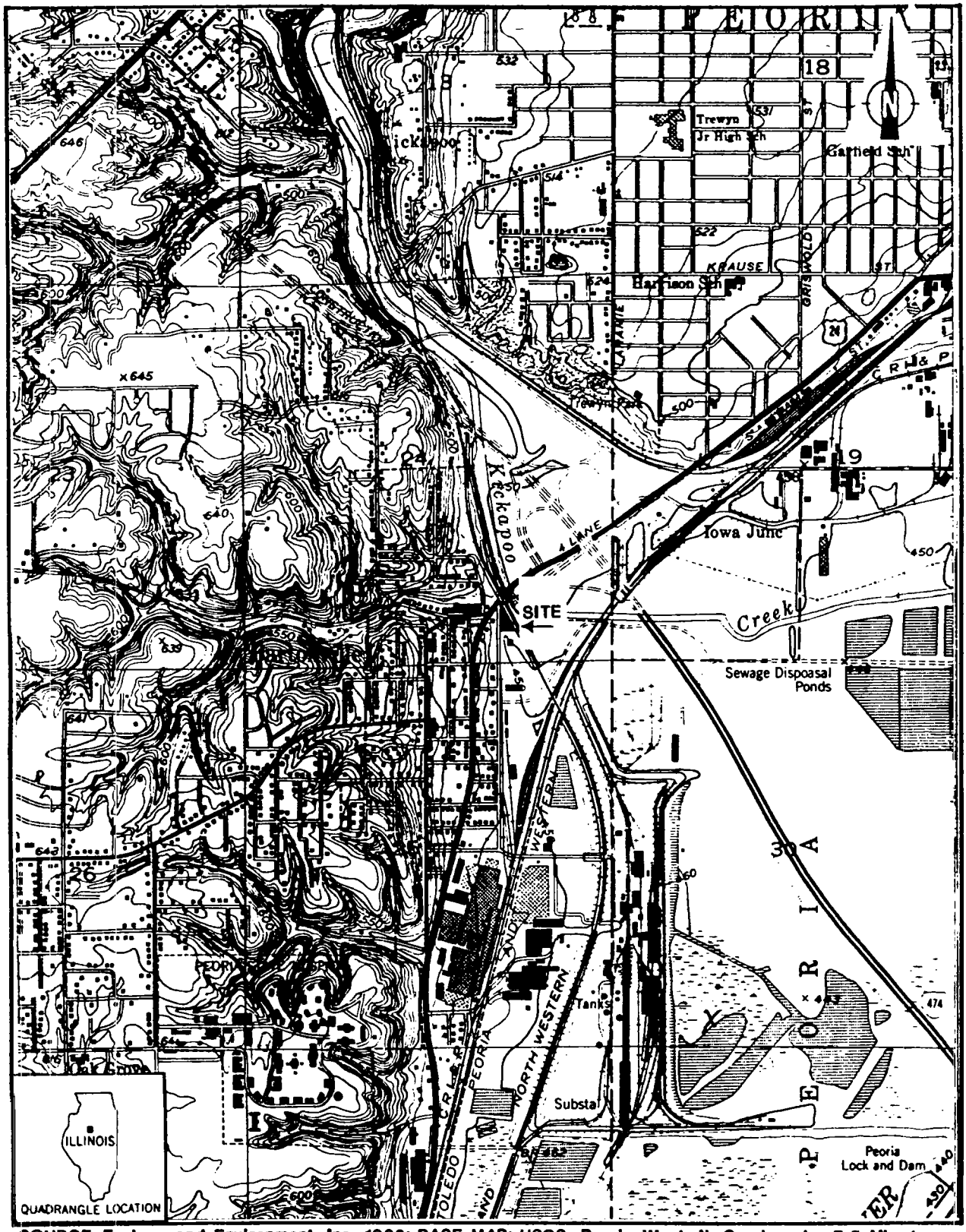


SOURCE: Ecology and Environment, Inc. 1990.

SCALE

0 50 100 150 200 FEET

FIGURE 3-1 SITE FEATURES



SOURCE: Ecology and Environment, Inc. 1990; BASE MAP: USGS, Peoria West, IL Quadrangle, 7.5 Minute Series, 1949, Photorevised 1979.

SCALE

0 ½ 1 MILE

FIGURE 2-1 SITE LOCATION